

# WEST

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L7: Entry 16 of 27

File: USPT

May 12, 1998

US-PAT-NO 5750105 & 6136310 need new ODA rejection

TITLE: Recombinant antibodies for human therapy

DATE-ISSUED: May 12, 1998

INVENTOR-INFORMATION:

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US-CL-CURRENT:  $\underline{424}/\underline{133.1}$ ;  $\underline{424}/\underline{137.1}$ ,  $\underline{424}/\underline{138.1}$ ,  $\underline{424}/\underline{177.1}$ ,  $\underline{530}/\underline{387.3}$ 

#### CLAIMS:

### We claim:

- 1. An improved method for treatment of a subject which comprises the administration of an antibody to a subject in need for such treatment, wherein the improvement comprises the administration of a therapeutically or prophylactically effective amount of an antibody which comprises an Old World monkey variable region which binds to an antigen, or antigen-binding portion thereof, and a human constant domain.
- 2. The method of claim 1, wherein said antibody binds to a tumor antigen and the treatment comprises treatment of cancer.
- 3. The method of claim 1, wherein said antibody binds to an antigen involved in autoimmune response and the treatment comprises treatment of an autoimmune disorder.
- 4. The method of claim 1, wherein said antibody binds to an antigen wherein said antigen is a receptor expressed by a cell of the treated subject.
- 5. The method of claim 1, wherein said antigen is selected from the group consisting of CD58, VCAM, VLA4, CD2, LFA3, ELAM, LAM, CD25, CD4, CD19, CD20, CD23, CD41, CD44, CD54, TNF.alpha., TNF.beta., Tn antigen, IL-1, IL-8, human T-cell receptor, CD3, CD28, CD8, CD18, CD11a, CD11b, CD11c, CD5a, CD45, neu oncogene product, MDR-1, TGF.alpha., TGF.alpha.-receptor, PDGF, and CD71.
- 6. The method of claim 1, wherein said antigen-binding portion comprises one or more CDR regions of an  $\underbrace{\text{Old World}}_{}$  monkey variable region.
- 7. The method of claim 1, wherein said antibody comprises an entire variable region of an <u>Old World</u> monkey antibody.
- 8. The method of claim 1, wherein the treatment comprises treatment of a disease selected from the group consisting of rheumatoid arthritis, eczema, and immuno-modulated diseases, and the antigen bound by the antibody is CD4.
- 9. The method of claim 8, wherein the antibody comprises the variable domain

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sequence as set forth in Sequence ID NO. 108 or Sequence ID NO. 110.

10. The method of claim 9, wherein the therapy is for the treatment of rheumatoid arthritis.

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### End of Result Set

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L1: Entry 1 of 1

File: USPT

Oct 24, 2000

US-PAT-NO: 6136310

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TITLE: Recombinant anti-CD4 antibodies for human therapy

DATE-ISSUED: October 24, 2000

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Hanna; Nabil Olivenhain CA Newman; Roland Anthony San Diego CA Reff; Mitchell Elliot San Diego CA

US-CL-CURRENT: 424/154.1; 424/133.1, 424/141.1, 530/387.3

#### CLAIMS:

### We claim:

- 1. A chimeric antibody specific to human CD4 which comprises the variable light chain sequence set forth in SEQ. ID. NO. 5 and a heavy chain sequence selected from the group consisting of the gamma-4 heavy chain sequence set forth in SEQ. ID. NO. 7, the gamma-4 heavy chain sequence set forth in SEQ. ID. NO. 9, and the gamma-4 heavy chain sequence set forth in SEQ. ID. NO. 11.
- 2. The chimeric anti-CD4 antibody of claim 1, wherein the gamma-4 heavy chain contained therein possesses the sequence set forth in SEQ. ID. NO. 11.
- 3. The chimeric anti-CD4 antibody of claim 1, wherein the gamma-4 heavy chain possesses the sequence set forth in SEQ. ID. NO. 9.
- 4. The anti-CD4 chimeric antibody of claim 1, wherein the gamma-4 heavy chain possesses the sequence set forth in SEQ. ID NO. 7.
- 5. A method of treating rheumatoid arthritis in a subject comprising administering a chimeric anti-CD4 antibody according to claim 1, in an amount effective to produce immuno suppression.
- 6. A method of treating rheumatoid arthritis in a subject comprising administering a chimeric anti-CD4 antibody according to claim 1, in an amount effective to produce immuno suppression.
- 7. A method of treating rheumatoid arthritis in a subject comprising administering a chimeric anti-CD4 antibody according to claim 3, in an amount effective to produce immuno suppression.
- 8. A method of treating rheumatoid arthritis in a subject comprising administering a chimeric anti-CD4 antibody according to claim 4, in an amount effective to produce immuno suppression.
- 9. A method of treating psoriatic arthritis in a subject comprising administering

an effective amount of a chimeric anti-CD4 antibody according to claim 1, to produce immuno suppression.

- 10. A method of treating psoriatic arthritis in a subject comprising
- administering an effective amount of a chimeric anti-CD4 antibody according to claim 2, to produce immuno suppression.
- 11. A method of treating psoriatic arthritis in a subject comprising administering an effective amount of a chimeric anti-CD4 antibody according to claim 3, to produce immuno suppression.
- 12. A method of treating psoriatic arthritis in a subject comprising administering an effective amount of a chimeric anti-CD4 antibody according to claim 4, to produce immuno suppression.
- 13. A pharmaceutical composition which comprises a chimeric anti-CD4 antibody according to claim 1, and a pharmaceutically acceptable carrier.
- 14. A pharmaceutical composition which comprises a chimeric anti-CD4 antibody according to claim 2, and a pharmaceutically acceptable carrier.
- 15. A pharmaceutical composition which comprises a chimeric anti-CD4 antibody according to claim 3, and a pharmaceutically acceptable carrier.
- 16. A pharmaceutical composition which comprises a chimeric anti-CD4 antibody according to claim 4, and a pharmaceutically acceptable carrier.